Thursday, October 21, 2010 1:30:40 PM



Page 1

Item ID:

D206-642-241

Accept



Setup Start



Revision ID:

Item Name:

Required Date: 10/28/2010

Replacement Skidtube

Start Date:

10/21/2010

Start Oty: 1.00

Reg'd Oty: 1.00



Date:

Cust Item ID: Customer:

Date:

Reference:

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Process Plan:

Date:

Tooling:

Date:

Stop

Start

Stop



Sequence ID/ Work Center ID

Operation Description Set Up/ **Run Hours**

SPC (Y/N):

Tool ID

Tool # Plan Code Qty

Accept Reject Qty

Run

Reject Number

Insp. Stamp

Draw Nbr

Revision Nbr

QC:

D2650

Rev F

100

DOCUMENT CONTROL

Memo

0.00

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-241

CHG005

Dart Ae	rospace	Ltd						7	•
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DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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<u></u>									
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	_ Date: _	
	Re	solution:	Disposition	n:	QA: N/C CI	osed:		Date:	
NCR:		\	WORK ORDI	ER NON-CONFORMAI	NCE (NCF	R)			,
		Description of NC		Corrective Action Section	n B	Vorifi	cation	Annroval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date		ion C	Approval Chief Eng	QC Inspector
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D206-642-241

Accent



Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

10/21/2010

OC:

Start Oty: 1.00

Required Date: 10/28/2010 Reg'd Oty: 1.00

Cust Item ID: Customer:

Reference:

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Process Plan:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Start Run



Stop

Sequence ID/ Work Center ID

Skidtubes

Skidtubes

Operation Description

Set Up/ **Run Hours**

Tool ID

Tool # Plan Code

Accept Otv

Reject Reject Otv Number

Insp. Stamp

Skidtubes

Memo

0.00

0.00

1-Deburr Fwd edge of tube

2- Remove ridge on inside of Fwd edge of tube as per Dwg D2650

10-10-26.

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

Pick:

Aluminum Rod□

4-Grind weld flush to cap on top surface only.

M115778 BE10-10-26 BE10-10-26

5-Cut Aft end as per dwg 2650 from front of tube and Deburr

6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D260

7-Open holes for Aft end cap as per Dwg D2650 with #30 Drill Bit using DT8025.

8-Drill pilot holes using Dt 8167.

9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.

10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.

10-10-28

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WORK ORDER CHANGES									,
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No: PAR #:			Fault Cate	gory:	NCR: Yes	No DQ	A:	Date:	
Resolution: Disposition: QA: N/C Closed: Date:						Date: _			
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Work	Order ID	63133

Thursday, October 21, 2010 1:30:40 PM



Page 3

Item ID:

D206-642-241

Accept



Setup Start

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

10/21/2010

Start Otv: 1.00

Required Date: 10/28/2010

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Date: _____

Tooling:

SPC (Y/N):

Date:

Date:

Run

Start

Stop



Sequence ID/

Set Up/

Tool ID

Tool # Plan

Accept

Reject

Reject

Work Center ID

Operation Description

Run Hours

Code

Otv

Qty

Insp. Number Stamp

11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet head

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D2650

13-Remove D3286-1 doubers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D2650

15-C'sink GHW rivet holes as per Dwg D2650

10-10-28

120

OC

Quality Control

QC6- Inspect dimensions to drawing

Memo

Dart Ae	rospace L	_td						No.	
W/O:			WC	RK ORDER CHANG	ES				
DATE	STEP	PR	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC inspector
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NCR:		·	WORK ORDE	R NON-CONFORMA	NCE (NCR)			
DATE	STEP	Description of NC Section A	Corrective Action Initial Action Descrip		Section B ption Sign &		cation	Approval Chief Eng	Approval QC inspector
-	-		Chief Eng	Chief Eng	Date	0001		Office Ling	QC IIISPONOI
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Quality Control

Memo



Page 4 Thursday, October 21, 2010 1:30:40 PM Item ID: D206-642-241 Accept Setup Start **Revision ID:** Stop Item Name: Replacement Skidtube ... **Start Date:** 10/21/2010 Start Otv: 1.00 **Cust Item ID: Required Date: 10/28/2010** Reg'd Oty: 1.00 **Customer:** Reference: Run Start Approvals: Process Plan: Date: Tooling: Date: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Insp. Description **Work Center ID** Otv **Run Hours** Code Qty Number Stamp 130 0.00 Skidtubes Skidtubes 0.00 Memo Skidtubes 1-Open crossbolt holes to Ø0.3125" 2-Drill pilot holes using DT8028-3, then open to Ø0.297" as per Dwg D2650. Open Aft cap hole #6. 3-Deburr tube and blow out chips from inside the tube 10-11-4 Chemical Conversion Coat per OSI005 4.1 0.00 HandFinish 0.00 Memo Hand Finishing QC3- Inspect Part Finish

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W/O:			W	ORK ORDER CHANGE	ES		······································	
DATE	STEP	PROCEDURE CHANGE			Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Cat	tegory:	NCR: Yes	No DQA:	Date: _	
	R	esolution:	Dispositi	ion:	_ QA: N/C Closed:		Date:	
NCR:			WORK ORI	DER NON-CONFORMA	NCE (NCF	₹)		- ,
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	on B Sign 8 Date		Approval Chief Eng	Approval QC Inspector
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NCR: WORK ORDER NON-CONFORMANCE (NCR)									
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Quality Control



Page 5

Insp.

Stamp

Thursday, October 21, 2010 1:30:40 PM Item ID: D206-642-241 Accept Setup Start **Revision ID:** Stop Item Name: Replacement Skidtube Start Date: 10/21/2010 Start Otv: 1.00 **Cust Item ID:** Reg'd Oty: 1.00 **Required Date: 10/28/2010** Customer: Reference: Start Run Process Plan: Date: Tooling: Approvals: Date: Stop Date: _____ **SPC (Y/N):** Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject . Reject Work Center ID Description Run Hours Code Otv Oty Number 160 0.00 Skidtubes Skidtubes 0.00 Skidtubes 1-Open holes to finished size as per Dwg D2650, D2650-3 Drilling Detail (without cutting fluid) 2-C'sink crossbolt spacer holes as per Dwg D2650(without cutting fluid) 3-Deburr and blow out all chips from inside the tube

0.00

0.00

QC6- Inspect dimensions to drawing

Memo

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Dart Aerospace Ltd

W/0: 6	W/O: 63/33 WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	В	y Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No: D206-642-24/ PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resolution:	Disposition:	QA: N/C Closed:	Date:

NCR:		W	ORK OR	DER NON-CONFORMANCE	E (NCR)	R)			
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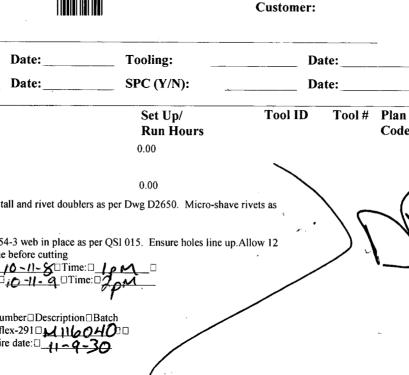
Page 6

Item ID:	D206-642-24	41	
Revision ID:			
Item Name:	Replacement S	Skidtube	
Start Date:	10/21/2010	Start Qt	y: 1.00
Required Date:	10/28/2010	Req'd Q	ty: 1.00
Reference:			
Approvals:	Process Pla	ın:	
	QC:	-	
Sequence ID/ Work Center II)	Operation Description	
180 Skidtubes		Skidtubes	Memo
Skidtubes			1-Locate, instrequired
			2-Bond D265 Hrs. cure time Start Date: D Finish Date: D
			Pick: Oty □Part No

190

QC

Quality Control



0.00

0.00

Sidulii

nspect part completeness to step on W/O

Accept

Start Stop Reject Reject Insp. Number Stamp

Setup Start

Run

Qty

Accept

Qty

Code

Stop

W/0: 63	3133	WORK ORDER CHANGES						
DATE	STEP	lern hay	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
10/11/08	190	change Ster to coil inspection of the Servey				10.11-15	Tolube	
10:11:15	220	perm change	M	(0.11.0)		Tiouris	10:1115	

Part No: 306-642-241 PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resolution:	Disposition:	QA: N/C Closed:	Date:

NCR: WORK ORDER NON-CONFORMANCE (NCR)							
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Thursday, October 21, 2010 1:30:40 PM



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Item ID:

D206-642-241

Accept



Setup Start

Stop

Start

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

10/21/2010

Start Otv: 1.00

Required Date: 10/28/2010

Rea'd Oty: 1.00



Cust Item ID:

Customer:

Reference:

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pprovals:	
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Process Plan:

Date: _____

Date:

SPC (Y/N):

Tool ID

Tool # Plan

Date:

Date:

Accept Code **Qty**

Reject Qty

Run

Reject Insp. Number Stamp

Work Center ID 200

Sequence ID/

Skidtubes

Skidtubes

Operation Description

Memo

Skidtubes

Set Up/ **Run Hours**

0.00

Tooling:

0.00

1-remove alodine from around hole and prepare for welding

BE 10/11/11

2-Prep per OSI 005 and Insert D2649 crossbolt spacers. Weld as per OSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod. Pick:

Qty□Part Number□Description□Batch A/R□□Aluminum Rod□ 111385

3-Grind welds flush as per Dwg D2650.

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D2650. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/R□SS Rod□

5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D2650. Deburr

BE10/11/15

Dart Aerospace Ltd

N/O:			WORK ORDER CHANGES						
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Item ID:

D206-642-241

Accept



Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

10/21/2010

Start Otv: 1.00

Req'd Qty: 1.00 **Required Date: 10/28/2010**



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Run Start

Reject

Oty

Date:

Stop

Stop

Sequence ID/ Work Center ID

210

HandFinish Hand Finishing Operation Description Set Up/ **Run Hours**

Tool ID

Tool # Plan Code

Accept **Qty**

Reiect Number

Insp. Stamp

HandFinishing

Memo

0.00

0.00

Install D2680-041 Nut Plate as per Dwg D2650

BE 10/11/15

220

OC

Ouality Control

9- Inspect visual per OSI004- Fusion Welds

0.00

0.00

230

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Dart Aerospace Ltd

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W/O:			WO	RK ORDER CHAN	GES				<u>j</u>	•
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Resolution: Disposition:				QA: N	I/C Clos	sed:		Date:		
NCR:			WORK ORDE	R NON-CONFORM	MANCE (NCR)				
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Thursday, October 21, 2010 1:30:40 PM



Page 9

Item ID:

D206-642-241

Accept

Setup Start

Stop



Revision 1D:

Item Name: Replacement Skidtube

Required Date: 10/28/2010

Start Date:

10/21/2010

Start Oty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Reg'd Oty: 1.00

Date:

Tooling:

Date:

Code

Start

Stop



Date:

SPC (Y/N):

Set Up/

Tool ID

Tool # Plan

Accept

Qty

Reject Qty

Reject Insp. Number Stamp

Work Center ID 240

Sequence ID/

HandFinish

Operation

Description

Pressure Wash per OSI005 4.3

Memo

Run Hours

0.00

10/11/12

Date:

Run

Hand Finishing

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in

250

Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

START TIME:

FINISH TIME:

OVEN TEMPERAT

0.00

0.00

1 16/10-11-18

260

Quality Control

QC3- Inspect Part Finish

Memo

81/11/01 /KC=

0.00

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W/O:			WO	RK ORDER CH	ANGES					··
DATE	STEP	PRO	CEDURE CHAN	IGE		Ву	By Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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	R	esolution:	Disposition:			QA: N/C Closed:			Date:	
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DATE STEP Description of NC Section A Section A Section A Section A Section C Section

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Item ID:

D206-642-241

Accept



Setup Start

Stop

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

10/21/2010

Start Oty: 1.00

Required Date: 10/28/2010

Reg'd Qty: 1.00



Cust Item ID: **Customer:**

Reference:

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	\mathbf{v}	10	v a	13.

Process Plan: Date:

Tooling:

Date:

Tool ID

10/11/19

Date:

Start Run



Date: _____

SPC (Y/N):

Set Up/

Run Hours

Tool # Plan

Code

Reject Accept Oty

Otv

Reject Number

Insp. Stamp

Sequence ID/ Work Center 1D

270



HandFinish Hand Finishing HandFinishing

Operation

Description

Memo

0.00

1- Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside

insert holes before installing wearpad/wearplate.

A/R \Bigcircle Sikaflex-291 \Bigcircle A \ | 15 \ | 4 \ \Bigcircle \Bigcircle \Bigcircle \Bigcircle A \ \Bigcircle B \ \ Sikaflex expire date:□ (100)

- 2-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D2650 (D2650-3 detail). Clean excess adhesive.

3-Install MS27039-4-06 Screw as per DEO 9153.

4 -Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive A/R□□Sikaflex-291□ バルリンリ 切□ Sikaflex expire date:

5 -Wing Walk as per Dwg D2650-3 and QSI 005 4.4 A/R Batch: 115790

Batch: N/1△



QC5- Inspect part completeness to step on W/O

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0.00

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Ouality Control

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W/O:			WC	RK ORDER CHANG	ES				
DATE	STEP	PR	OCEDURE CHAI	NGE	Ву	Da	te Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Item ID:

D206-642-241

Accept

Setup Start

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

10/21/2010

Start Otv: 1.00

Rea'd Otv: 1.00 **Required Date:** 10/28/2010



Cust Item ID: Customer:

Date:

Tool # Plan

Code

Reference:

Approvals:

Process Plan:

QC:

Operation

Description

Date:

Date: Tooling:

SPC (Y/N):

Set Up/

Run Hours

Date:

Tool ID

Run

Start



Reject

Insp.

Stamp

Sequence ID/

Work Center ID

310

Packaging Packaging

Packaging

Memo Identify and pack for shipping as per PPP D206-664-241

Location:

PPP Rev:

320

OC

Quality Control

OC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Stop

Reject

Number

Qty Oty

Accept

10/11/25 Ary MF 10-11-24

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Picklist Print

Thursday, October 21, 2010 1:30:44 PM

Work Order ID: 63133

Parent Item:

D206-642-241

Parent Item Name: Replacement Skidtube



Start Date: 10/21/2010

Required Date: 10/28/2010

Page 1

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev: 04.12.02□Revised procedural steps□KJ/JLM IPP RevP: revise and update route/bom DD 10.01.06 verified by:EC□IPP rev Q 10.02.19 per

PAR 09-043 EC verified by: DD

	AR 09-043 EC	verified by: DD											
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2620 Skidtube, 206 Skidtube		Manufactured	No			110	Each	14.0000	1	1			
D3286-1	IIII	Manufactured	No		616 <u>32</u> 62684	<u>Loc (</u>	Otv 14 4 10 Each	<u>Loc Code</u> 25.0000		2	D.)0-,	O-26
D2647		Manufactured	No	Location ST050	52844	<u>Loc (</u>	Oty 25 25 25 Each	Loc Code (62.0000		1	P	10-1	·0-Z;
D2654-3 Web		Manufactured	No	Location FP	55352 8632	180 49	Oty 62 62 Each	0.0000		1		- 10-10. 	

Dart Aeı	rospace	Ltd							•
W/O:			WO	RK ORDER CHANG	ES				
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Thursday, October 21, 2010 1:30:44 PM

Work Order ID: 63133				•							
Parent Item: D206-642-241											
Parent Item Name: Replacement Skidtu	ıbe		•		·.		t Date: 10		Required Date: 10/28/2010 Required Qty: 1.00		
CR3212-4-04	Purchased	No		180	Each	479.0000	52	52		_	
iii			Location	<u>Lo</u>	c Oty	Loc Code			•		
			ST311		479						
			112314		63			1	(a) (a)		
			113644)	16 200			(02)	10-11-	-8	
			115698		200					0	
D2649	Manufactured	No		200	Each	199.0000	18	18	-		
1 ABB 1148 1818 11818 81121 BIBLE 1814 1881									٠., ٢		
Cross Bolt Spacer						li .	BB BB -		The second secon	_	
5,000 2 000 3 ,000	₩ marks		Location	Lo	e Oty	Loc Code	/	2 / 25	369 x10 00	<i>\</i>	
			LG		199		ϕ	2 al	29 1/8 BE	rey	
			58545		2				-	/	
,			60652	•	4				_		
			61496		13				-		
			62889		180				_		
D3286-3	Manufactured	No		200	Each	9.0000	2	2			
			Location	Lo	c Oty	Loc Code					
			LG		9				. /		
			46643		9			_2_	BE-10/11/15		
D2680-041	Manufactured	No		210	Each	25.0000	1	1			
- Nut Plate						ļ				_	
			Location	<u>Lo</u>	c Oty	Loc Code			/		
			ST021		25				- 1 / / -		
			55366		25				AE 10/11/15		
									v		

Dart Ae	rospac	e Ltd										
W/O:				WORK	ORDER CHANG	BES					, ,	
DATE	STEP		PRO	В	у	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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		•		1								
Part No):		PAR #:	Fault Category:		_ NCR:	Yes N	No DQ	A :	Date: _		
7	\			Disposition:								
NCR:	•			WORK ORDER N	ON-CONFORM	ANCE (I	NCR))	*			

NCR:	,	WORK ORDER NON-CONFORMANCE (NCR)								
		Description of NC		Corrective Action Section B	Verification	Annroval	Approval			
DATE	STEP	Section A	Initial Chief Eng			Section C	Approval Chief Eng	QC inspector		
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Thursday, October 21, 2010 1:30:44 PM

Work Order ID: 63133										
Parent Item: D206-642-241										
Parent Item Name: Replacement Skidtu	ibe						Start Date: 10/21/2010 Start Qty: 1.00			Required Date: 10/28/2010 Required Qty: 1.00
CR3212-4-03 Cherry Rivet	Purchased	No	-		210	Each	1,880.000	2	2	
			Location ST311	11359	Lo	1880	Hoc Code	M	11015	3 (2) BE10
•			1. 1. 1.	12314 14436 14450 14859		2 448 71 1354				
CCR264SS3-3	Purchased	No	Ŷ	. 1003	210	Each	422.0000	2	. 2	· · · · · · · · · · · · · · · · · · ·
•	•		Location		<u>L</u> c	oc Oty	Loc Code			
			1	12314 13539 13973		422 4 44 374			2	& Evolulis
D2646	Manufactured	No			270	Each	40.0000	1	1	BE10/11/15
			Location		<u>L</u> e	oc Oty	Loc Code			
			FP-4 5	7332 1		35 35				
			fp5	; 1752		1				• •
**			FP6	1752		4				
				2663	,	. 4				- -
			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					•		

Dart Aerospace Ltd

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DATE	STEP	PRO	OCEDURE CHAI	NGE	Е	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Cate	gory:	_ NCR:	Yes N	lo DQ	A:	Date: _	
	Re	solution:	Disposition	n:	_ QA: N	/C Clos	sed:		Date: _	
NCR:			WOŖK ORDI	ER NON-CONFORMA	NCE (NCR)		···-·	•	
DATE	CTED	Description of NC		Corrective Action Section			Verificatio	eation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		ign & Date	Secti		Chief Eng	QC Inspector
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Thursday, October 21, 2010 1:30:44 PM

Work Order ID: 63133 Parent Item: D206-642-241 Parent Item Name: Replacement Skidtube



Start Date: 10/21/2010

Required Date: 10/28/2010

Start Otv: 1.00

Required Otv: 1.00

D2651-1

Manufactured No

Manufactured

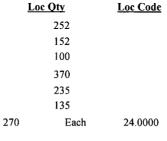
270

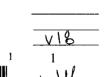
Each 622,0000

18

Plug

Locatio	<u> </u>	
FP		
	51530	
	61751	
fpa		
	53349	
	57869	





NAS1149D0463J Purchased

1115622

270



Washer

	ST300
No	

Location

Location

No

113288

Loc Otv 24 24 Each

626.0000

Loc Code

18

D2651-3

AN960ID416

MS27039-1-08

O-Ring

Purchased

FP 46114 61962

110835

114718

115108

Loc Otv 626 130 496 270 Each

Loc Qty

1,584.000

Loc Code

Loc Code

Screw

W 110835

No

XZ

H1 16/11/18

+ Qty (44) MS 27039 (1-08

Location ST291

1584 473 111 1000

1116022

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W/O: WORK ORDER CHANGES									•
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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	Re	esolution:	Disposition	on:	QA: N/C C	C Closed: Date:			
NCR:		V	WORK ORD	ER NON-CONFORMA	NCE (NC	R)			
DATE	0750	Description of NC		Corrective Action Section B		Verifi	fication	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	& Sect	ion C	Chief Eng	QC Inspector
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Thursday, October 21, 2010 1:30:44 PM

Work Order ID: 63133

D206-642-241

Parent Item Name: Replacement Skidtube



Start Date: 10/21/2010

Required Date: 10/28/2010

Start Qty: 1.00

Required Oty: 1.00

ALS4-1032-130

Parent Item:

Purchased

No

270

Each 2,969.000

Insert

Location	Loc Oty	Loc Code
PKG11	920)
114723	920)
ST282	2010)
110511	10)
115911	2000)
ST381	39)
114654	39)
	270 [Cook 100 0000

MS27039-4-06

Purchased

No

Each

108.0000

Screw

Location	<u>Lo</u>	c Oty	Loc Code
ST292		108	
109061		14	
115460		94	
	270	Each	0.0000

AN960JD10L

NAS1149D0332J Purchased

V7 Hl 10/4/15

Washer + Qty (44) AN960 CIUL

*NASII49(0332R/M11583Z

114884

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W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
10.11,45	270	USTE 0+y(44) MSC7039C1-08 BIN MI16027 Qfy (44) ANGLOCIOL BIN MI15832	lle	10/11/18	YAK Xyrt	10.11.58		

Part No:		PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
F	Resolution:		Disposition:	QA: N/C Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
		Description of NC		Corrective Action Section B			Approval	Approval		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Chief Eng	QC Inspector		
[0.11, 18	270	IPP calling up non-SS hardware for wearpicles	10.11.18 B/ orn	war Update IPP with correct pink aty			P 11.18			

Picklist Print

Page 6

Thursday, October 21, 2010 1:30:44 PM Work Order ID: 63133 Parent Item: D206-642-241 Parent Item Name: Replacement Skidtube Start Date: 10/21/2010 **Required Date: 10/28/2010** Start Qty: 1.00 Required Qty: 1.00 D3537-1 Manufactured 270 50.0000 Each 10/11/18 Wearpad Location Loc Oty Loc Code B6.2928 FP 55465 FP017 43 61986 43 FP17 57713 3 60491 3 D3537-3 Manufactured 270 Each 6.0000 Wearpad Location Loc Otv Loc Code FP17 1362705 60866 D3535-13 270 Manufactured 7.0000 Each 10/11/18 Wearshoe Location Loc Qty Loc Code FP018 7 62006_ D3536-13 270 Each Manufactured No 12.0000 10/11/16 Gasket Location Loc Qty Loc Code FP11 12 12 62007

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W/O:			WORK ORDER (CHANGES			
DATE	STEP	PROC	CEDURE CHANGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	·	PAR #:	_ Fault Category:	NCR: Yes	No DQA:	Date: _	
	Res	olution:	_ Disposition:	QA: N/C Clo	osed:	Date: _	
NCR:		W	ORK ORDER NON-CON	IFORMANCE (NCR			
DATE	CTED	Description of NC	Corrective Actio	n Section B	Verification	Approval	Approval

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
	T	Description of NC		Corrective Action Section B		Verification	Approval	A		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspector		
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Picklist Print

Thursday, October 21, 2010 1:30:44 PM

Page 7

Work Order ID: 63133

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube



Start Date: 10/21/2010

Required Date: 10/28/2010

Start Otv: 1.00

Required Oty: 1.00

D3535-21



Wearshoe

Manufactured No

Manufactured

Manufactured

270

270

270

Each

6.0000

D3536-21



Gasket

Location FP

Location

FP11

55730

61684

Loc Otv Each

11.0000

Loc Code

Loc Code

20/4/15

D3535-33



Wearshoe

No

No

Loc Qty 11 11

Each

9

Each

9.0000

D3536-33

Gasket



Manufactured No Location Loc Oty FP19

61502 270 Loc Code

7.0000

M 10/4/14

Location FP

58685

Loc Qty

Loc Code

Dart Aerospace I	Ltd
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W/O:			WORK ORDER CHANGES						
DATE	STEP	PR	OCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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	Resolutio	on:	Disposition:	QA: N/C C	losed:		Date: _		

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
		Description of NC		Corrective Action Section B		Varification	Annroyal			
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector		
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QTY QTY QTY QTY PART NUMBER DESCRIPTION X D2650-1 SKIDTUBE ASSEMBLY D2650-3 SKIDTURE ASSEMBLY D2650-5 X SKIDTUBE ASSEMBLY Х D2650-7 SKIDTUBE ASSEMBLY D2600-1-160 EXTRUSION D2654-1 WEB D2654-3 1 WEB 1 D2654-5 WER D2654-7 WEB D2646 AFT CAP 1 D2647 CAP 17 18 19 23 D2649 CROSS BOLT SPACER 16 18 14 22 D2651-1 PLUG 16 18 14 22 D2651-3 O-RING 1 D2680-041 NUT PLATE 2 2 D3286-1 DOUBLER 2 D3286-3 STUD 42 44 54 60 ALS7-1032-130 INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130) 2 2 2 AN960JD10L WASHER 2 CCR264SS3-3 2 2 2 RIVET 2 2 2 2 CR3212-4-03 RIVET 2 2 2 2 MS27039-1-08 SCREW 1 1 MS27039-4-06 SCREW 1 1 AN960JD416 WASHER 52 52 CR3212-4-04 RIVET

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER NO. 13/33 NO. 10-21



В

DRAWING UPDATED TO CURRENT STANDARDS, SHT 6 ADDED, ALL SECTION AND DETAIL VIEWS TRANSFERED TO SHT 6, SHT 1 IN PL PART D2649 QTY 80.80 UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239). RMOVE CBORE, CHG DRILL, ADD CHAMFER CP 06.03.30 REDRAW; INCORP. DE09136/9153/9163 CP 04.05.17 MOD GROUND HANDLING ON D2650-1/-3 CHANGE HOLE PATTERN AND FRONT END С DS 97,10,29 В AS MANUFACTURED CHANGES DS 97.06.26 NEW ISSUE Α DS 97.03.25 REV. DESCRIPTION BY DATE

DESIGN	DS	」DART AEROSPACE USA. INC !				
DRAWN	AdS	PORT HADLOCK, WA				
CHECKED		DRAWING NO. REV.	F			
MFG. APPR.	E	D2650 SHEET 1 O	F6			
APPROVED	10	TITLE SCA	LE			
DE APPR.	-	206/407 SKIDTUBE ASSEMBLIES	NTS			
DATE 08.0	80.8	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT BRIVATE AND CONSTRUCTION THAT IT IN NOT TO SE USED FOR MAY PURPOSE OR COMPACATED TO ANY OTHER PERSON WITHOUT THE PERSON WITHOUT OF THE				

/F NOTES:

D

1) MATERIAL: N/A

2) FINISH: -CHEMICAL CONVERSION COAT PER DART OSI 005 4.1

-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3

-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER

DART QSI 005 4.4

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: N/A

8) WELD PER DART OSLOGA

9) DAMAGE TOLERANCE ON FWD BEND:

THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0,020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.

10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015

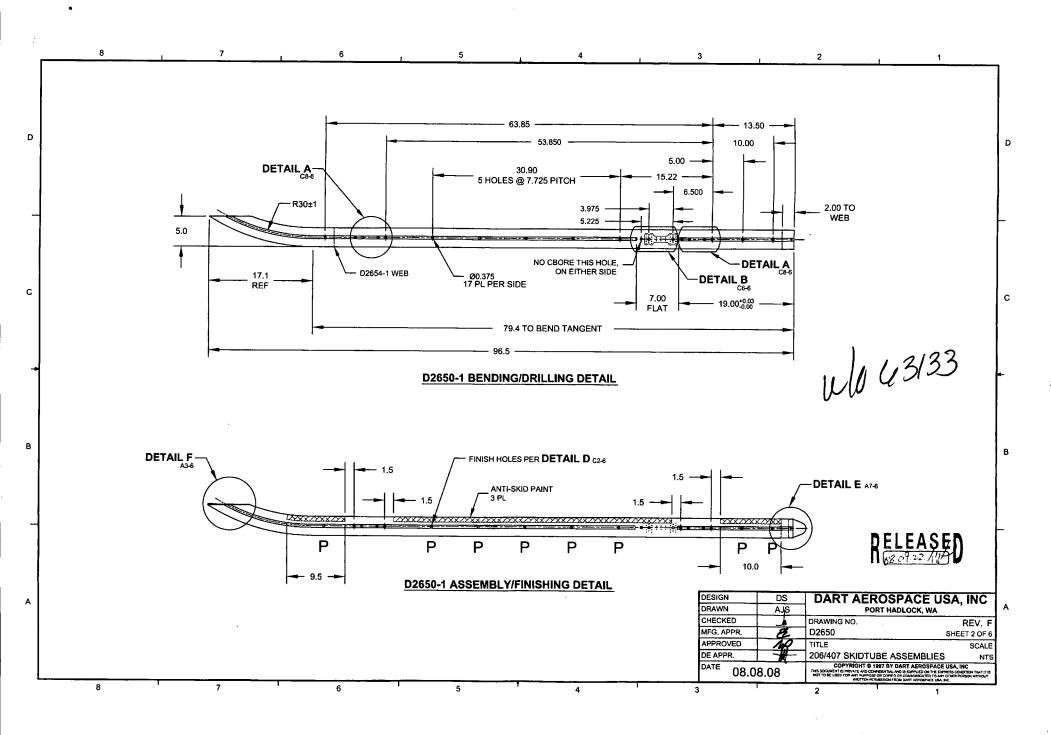
11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.

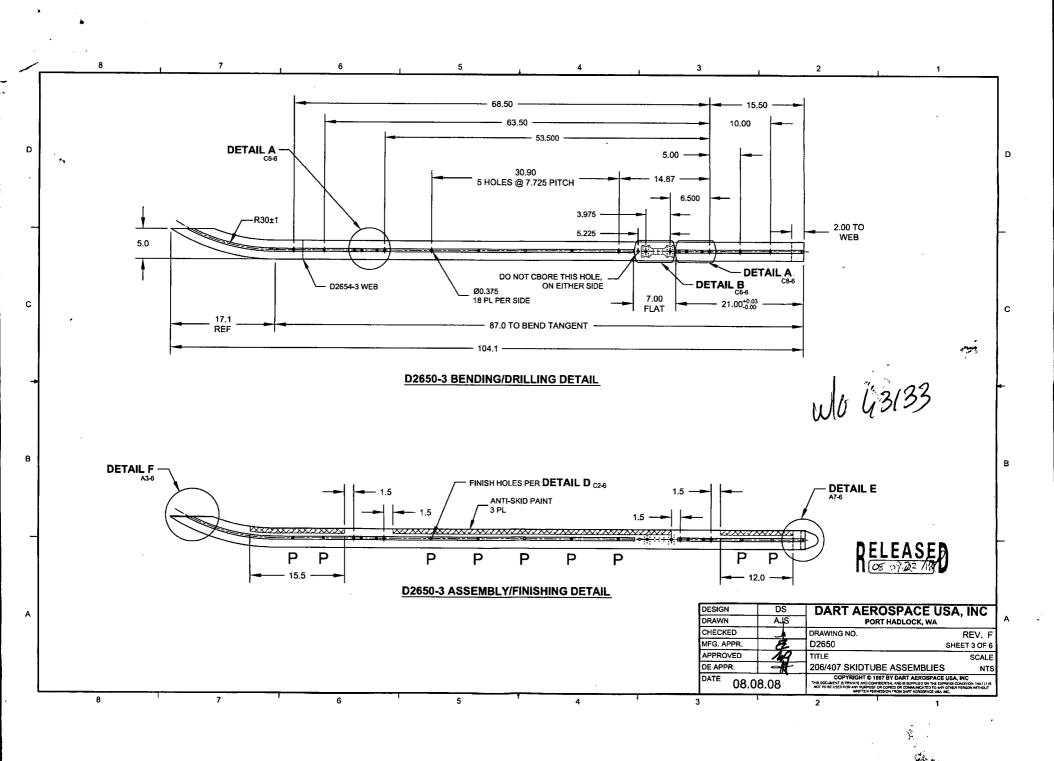
13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

Dart Aerospace Ltd

Dart Ae	ospace L	tu							
W/O:			WO	RK ORDER CHANGES	3				•
DATE	STEP	PRO	OCEDURE CHAI	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	•	PAR #:	Fault Cate	jory:	NCR: Yes	No DQ	A:	Date: _	
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DATE	0750	Description of NC	Corrective Action Section B			Verifi	cation	Approval	Approval
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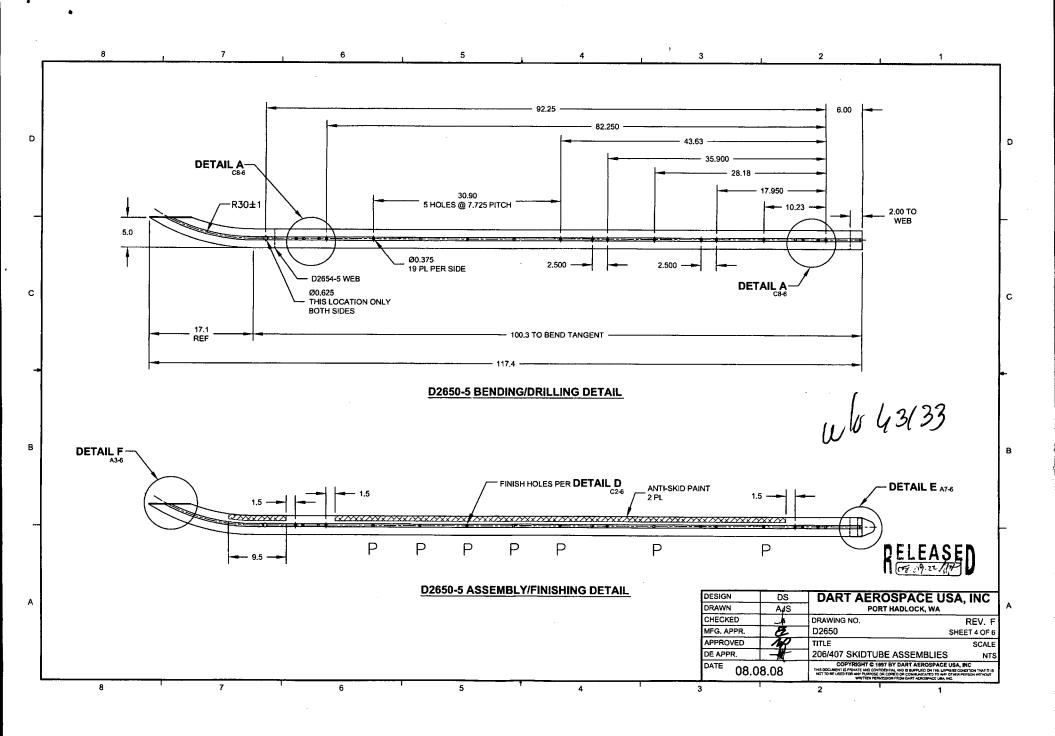


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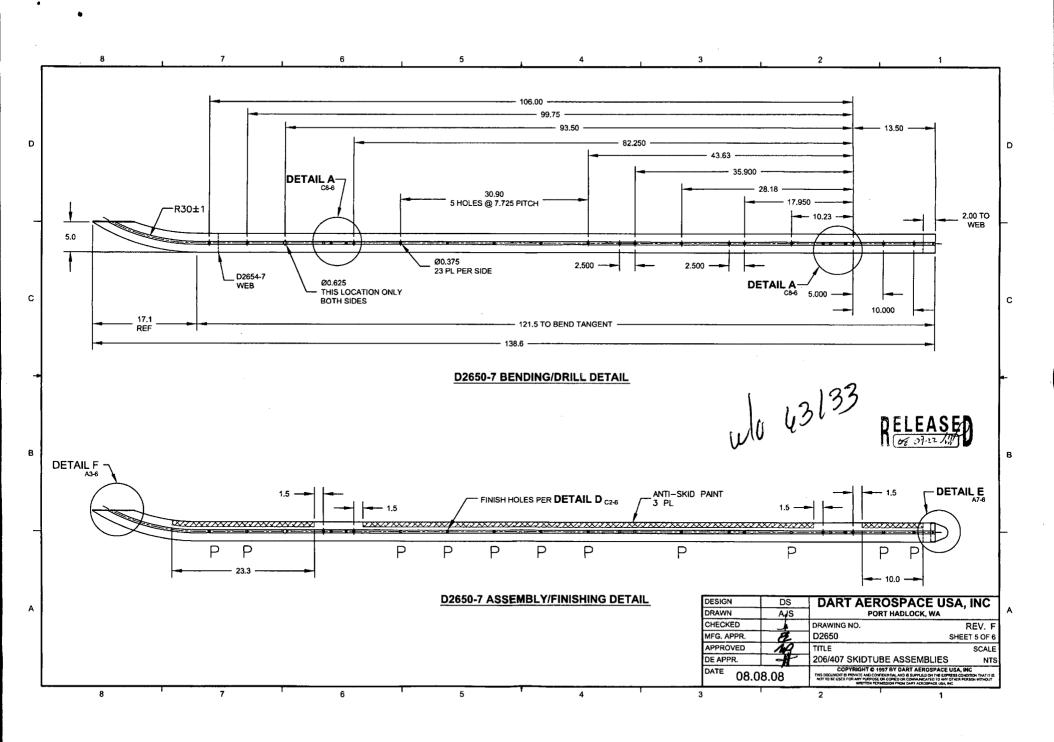
Dart Aerospace Ltd

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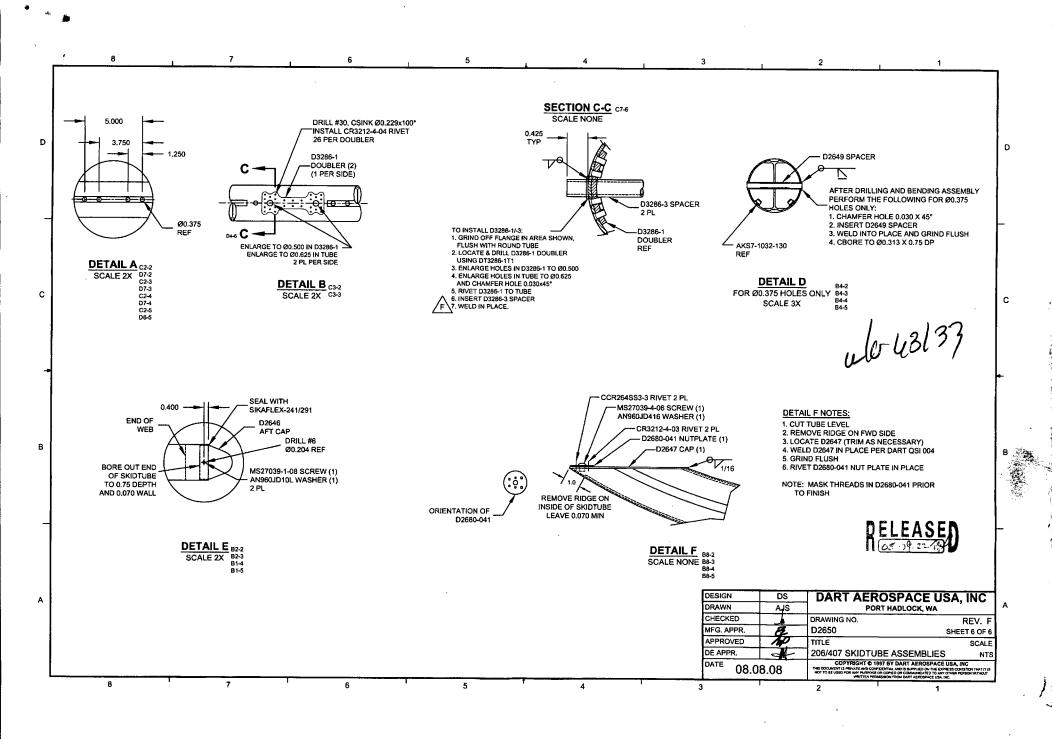
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W/O:			WORK ORDER CHANGES								
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		Description of NC	-	Corrective Action Section B		Verification	Annroyal	Approval
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